What is claimed is:

1. A method of preparing a silver halide emulsion comprising silver halide grains containing at least 90 mol% chloride, 0.02 to 5.0 mol% bromide and 0 to 2.0 mol% iodide, based on silver and occluding at least one Group 8 metal compounds and at least one iridium compound, the method comprising the steps of:

(i) forming the silver halide grains by mixing a silver salt and a halide salt in a dispersing medium and

(ii) subjecting the silver formed silver halide grains to selenium sensitization,

wherein in the step (ii), the selenium sensitization is performed in the presence of at least one selected from the group of a compound represented by formula (1), (2) or (3), a compound represented by formula (4), fine grains of at least one of silver sulfide, gold sulfide and silver-gold sulfide, and a compound represented by formula (S):

formula (1) $R-SO_2S-M$

formula (2) $R_1-SO_2S-R_2$

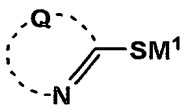
formula (3) $R_3-SO_2S-L_m-SSO_2-R_4$

wherein R, R_1, R_2, R_3, and R_4 are each an aliphatic group, an aromatic group or a heterocyclic group; M is a cation; L is a divalent linkage group; and m is 0 or 1;

formula (4) $R_{11}-(S)_{m1}-R_{12}$

wherein R_{11} and R_{12} are each an aliphatic group, an aromatic group or a heterocyclic group, or R_{11} and R_{12} combine with each other to form a ring; m1 is an integer of 2 to 6;

formula (S)



wherein Q is an atomic group necessary to form a 5- or 6-membered nitrogen-containing ring; M^1 is a hydrogen atom, an alkali metal or a cation group.

2. The method of claim 1, wherein the selenium sensitization is performed in the presence of at least one selected from the group of a compound represented by formula (1), (2) or (3).

3. The method of claim 1, wherein the selenium sensitization is performed in the presence of at least one selected from the group of a compound represented by formula (4).

4. The method of claim 1, wherein the selenium sensitization is performed in the presence of fine grains of at least one of silver sulfide, gold sulfide and silver-gold sulfide.

5. The method of claim 1, wherein the selenium sensitization is performed in the presence of a compound represented by formula (S).

6. The method of claim 1, wherein in the step (i), the silver salt and the halide salt are mixed with an iridium coordination complex containing an aqua ligand or an organic ligand.

7. The method of claim 1, wherein in the step (i), the silver salt and the halide salt are mixed with a Group 8 metal compound represented by the following formula (A):

formula (A) $R^{21}{}_{na}[M^{21}X^{21}{}_{ma}Y^{21}{}_{6-ma}]$

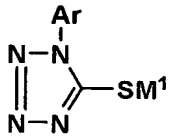
wherein M^{21} is a metal selected from the group consisting of iron, cobalt, ruthenium, iridium, rhodium, osmium and platinum; R^{21} is an alkali metal; "ma" is an integer of 0 to

6 and "na" is an integer of 0 to 4; X^{21} and Y^{21} are each a ligand.

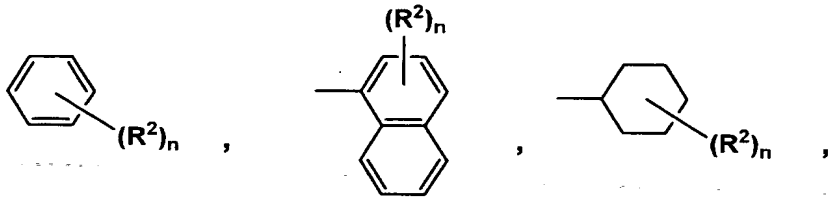
8. The method of claim 1, wherein in the step (i), the silver salt and the halide salt are mixed with a compound represented by the formula (S).

9. The method of claim 8, wherein the compound represented by the formula (S) is a compound represented by the following formula (S-2):

formula (S-2)



wherein Ar is a group represent by the following formula:



wherein R^2 is an alkyl group, an alkoxyl group, a carboxyl group or its salt, a sulfo group or its salt, a hydroxyl group, an amino group, an acylamino group, a carbamoyl group or a sulfonamido group; n is an integer of 0 to 2; M^1 is the same as defined in formula (S).

10. A silver halide emulsion comprising silver halide grains

(a) containing at least 90 mol% chloride, 0.02 to 5.0 mol% bromide and 0 to 2.0 mol% iodide, based on silver,

(b) occluding at least one Group 8 metal compound and at least one iridium compound and

(c) the silver halide emulsion being prepared by a process comprising

(i) forming the silver halide grains and

(ii) subjecting the silver halide grains to selenium sensitization, wherein in the step (ii), the selenium sensitization is performed in the presence of at least one selected from the group of a compound represented by formula (1), (2) or (3), a compound represented by formula (4), fine grains of at least one of silver sulfide, gold sulfide and silver-gold sulfide, and a compound represented by formula (S):

formula (1) $R-SO_2S-M$

formula (2) $R_1-SO_2S-R_2$

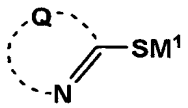
formula (3) $R_3-SO_2S-L_m-SSO_2-R_4$

wherein R, R_1, R_2, R_3, and R_4 are each an aliphatic group, an aromatic group or a heterocyclic group; M is a cation; L is a divalent linkage group; and m is 0 or 1;

formula (4) $R_{11}-(S)_{m1}-R_{12}$

wherein R_{11} and R_{12} are each an aliphatic group, an aromatic group or a heterocyclic group, or R_{11} and R_{12} combine with each other to form a ring; m1 is an integer of 2 to 6;

formula (S)



wherein Q is an atomic group necessary to form a 5- or 6-membered nitrogen-containing ring; M^1 is a hydrogen atom, an alkali metal or a cation group.

11. The silver halide emulsion of claim 10, wherein the selenium sensitization is performed in the presence of at least one selected from the group of a compound represented by formula (1), (2) or (3).

12. The silver halide emulsion of claim 10, wherein the selenium sensitization is performed in the presence of at least one selected from the group of a compound represented by formula (4).

13. The silver halide emulsion of claim 10, wherein the selenium sensitization is performed in the presence of fine grains of at least one of silver sulfide, gold sulfide and silver-gold sulfide.

14. The silver halide emulsion of claim 10, wherein the selenium sensitization is performed in the presence of a compound represented by formula (S).

15. The silver halide emulsion of claim 10, wherein the iridium compound is an iridium coordination complex containing an aqua ligand or an organic ligand.

16. The silver halide emulsion of claim 10, wherein the Group 8 metal compound is a compound represented by the following formula (A):

formula (A) $R^{21}{}_{na}[M^{21}X^{21}{}_{ma}Y^{21}{}_{6-ma}]$

wherein M^{21} is a metal selected from the group consisting of iron, cobalt, ruthenium, iridium, rhodium, osmium and platinum; R^{21} is an alkali metal; "ma" is an integer of 0 to 6 and "na" is an integer of 0 to 4; X^{21} and Y^{21} are each a ligand.

17. The method of claim 1, wherein the silver halide grains each comprise a core and one or more shells and an outermost shell comprises a bromide-localized silver halide phase.

18. The silver halide emulsion of claim 10, wherein the silver halide grain each include an iodide-localized silver halide phase in the interior of the grains.

19. The method of claim 10, wherein the silver halide grains each occlude a compound represented by formula (S).

20. A silver halide photographic material comprising on a support at least one image forming layer, wherein the image forming layer comprises a silver halide emulsion as claimed in claim 10.